Indiana's NPS Program

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Abstract
Although a variety of existing programs have helped curb non-point source (NPS) water pollution in Indiana, the effects have often been only coincidental to their primary goals. State conformance with Section 319 of the Clean Water Act has recently resulted in development of an integrated, multi-disciplinary NPS control plan that refocuses many programs on the issue of water quality, and has established a number of new initiatives. This effort has been significantly enhanced by national attention on the topic, with shifts toward a water quality emphasis by federal agencies such as the Department of Agriculture. Indiana is now able to address NPS water pollution in a much more unified fashion, guided by a comprehensive plan. Indiana's new Lake Enhancement Program is a part of "T by 2000," a statewide strategy for dealing with soil erosion and sedimentation problems. The goal for lake enhancement is to control the flow of sediment and associated nutrients into public lakes. Toward that goal, Indiana Department of Natural Resources' (IDNR) Division of Soil Conservation is providing technical and financial assistance for lake enhancement needs in accordance with guidelines set by the State Soil Conservation Board, the policy-making body for the division. The Lake Enhancement Program's policies and procedures will be reviewed and specific examples of how the program operates will be discussed.

Key words: Indiana, nonpoint sources, water quality, pollution

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Our environment looks and is cleaner than it was twenty years ago when the first Earth Day was celebrated. That's not to say that there isn't a great deal more to be done....but progress has been made, and that progress has been the result of the cooperative efforts of many federal and state agencies, local governments, and concerned citizens who value our water resources.

Up until now, the majority of our work in protecting water quality has been in cleaning up point source discharges by setting water quality standards, enforcing NPDES permit limitations, and promoting construction and upgrading of wastewater treatment facilities. Indiana is committed to continuing that work on point sources so that all communities and industries discharging to state waters will be in compliance with the Clean Water Act.

Review of surface water quality data for Indiana shows that pollution coming from point sources has declined significantly in twenty years. However, analysis has also shown that nonpoint source pollution continues to degrade water quality and that use impairments are often caused by NPS pollution, either by itself, or in combination with point sources. Studies of Indiana's public lakes reveal that they are particularly vulnerable to certain types of NPS pollution, which currently threaten the designated uses of many of them.

Traditionally, in many respects, NPS water pollution control has been secondary to regulation of point sources in Indiana as well as at the national level. This can be attributed largely to the difficulty and expense involved in identifying and monitoring many of the nonpoint pollutant sources...but it can also be attributed to the pervasive nature of the problems, and tacit acceptance arising from the belief that resolution of the problems was not economically feas-

ible. However, it's become obvious that state water quality goals will never be attained without reduction of NPS pollution.

Indiana state government has sponsored some long-standing programs that have partially addressed certain categories of NPS pollution, such as disposal of waste from confined animal production facilities and control of agricultural erosion, for example, but none of the efforts have been adequate to fully address the problems. In addition, there have been some areas which have received only minimal attention, such as evaluating the effects that storm sewers and atmospheric deposition have on water quality. So, there have been obvious voids, then, in Indiana's overall ability to gauge and control the various NPS pollution, problems that exist in the state.

Section 319 of the Clean Water Act provided the impetus for the state to develop a comprehensive plan which would integrate all aspects of NPS control. In response to requirements of Section 319, a multiagency Task Force was formed which provided a strategy development forum for the state's resource professionals. By bringing a variety of program directors together as a group, a climate of increased cooperation was created in which NPS pollution control could be more thoroughly addressed. The Task Force included representatives of nine different organizations and was responsible for two major accomplishments:

- production of NPS "Assessment Report" which summarized available information regarding NPS-impacted water bodies and the causes of the problems, and;

- development of a NPS "Management Program" describing categorical NPS problems and their proposed solutions.

I should say a few words about the Assessment Report, since during its preparation one of the things we discovered was just how little actual scientific information was available regarding NPS impacts to public waters, and how difficult it was going to be to obtain the information in the future. So, although the rationale for preparing the report was to somehow quantify the extent of NPS pollution in the state, we were only able to assemble the data that were then available, which describe merely a fraction of the state's waters. This has left us in the position of needing to acquire an enormous amount of additional information if we're to be able to truly assess statewide NPS effects, in order to prioritize problem areas for treatment.

We are proceeding slowly in that direction, having begun to develop a variety of biological monitoring programs, since those appear to be the most cost effective and practical methods of evaluating impacts to aquatic systems, but our resources for pursuing such an initiative are limited.

The Management Program itself is based on five premises which must be supported in order for the program to be successful:

(1) financial assistance must be made available to fund recommended activities;

(2) activities involving different organizations must be well coordinated;

(3) research and monitoring must be continued which will provide information on water quality trends that will guide future program needs;

(4) information and education efforts must be an integral component of the overall program; and,

(5) in addition to financial and technical assistance, regulatory alternatives must also be considered

for the resolution of some types of problems.

It will take a great deal of money to implement all of the Management Program's recommendations, and Indiana has recently received assistance in this regard through EPA's granting of Section 319 funds to the state. Let me briefly highlight some of the work that we will be doing with the money.

Portions of the money will be used to finance projects demonstrating the elimination of acid runoff from abandoned mine land and reduction of erosion from a commercial timber harvesting operation.

Part of the money will be used to fund a NPS evaluation and prioritization project in an industrialized urban watershed.

A state university will use some of the grant to develop computer software that can be distributed to local health departments, enabling them to evaluate the adequacy of proposals for on-site disposal systems.

Another university will be paid to evaluate the effects of BMP implementation on particular lake watersheds.

And there will be a number of other uses for the money, with the most interesting being a survey of the Eel River to determine how NPS pollution is affecting the aquatic biota.

The continued support and involvement of federal, state, and local governments in the control of NPS pollution is essential. We're hopeful that current efforts, in combination with our Manage-ment Program's actions and federal assistance through Section 319, will eventually allow our streams and lakes to regain their former vitality.